

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as necessary)

Sheet

1

Of

11

		<i>Complete if Known</i>	
		Application Number	10/594,992
		Filing Date	November 16, 2006
		First Named Inventor	B. Michael Longenecker
		Art Unit	1642
		Examiner Name	Mark Halvorson
		Attorney Docket Number	34395-806.831

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
1.	US-6,683,052		01-27-2004	Thiam et al.	
2.	US-6,600,012		07-29-2003	Agrawal et al.	
3.	US-6,344,203		02-05-2002	Sandrin et al.	
4.	US-6,090,406		07-18-2000	Popescu et al.	
5.	US-6,015,564		01-18-2000	Boutillon et al.	
6.	US-6,013,779		01-11-2000	Wong et al.	
7.	US-5,993,823		11-20-1999	Boutillon et al.	
8.	US-5,910,306		06-08-1999	Alving et al.	
9.	US-5,871,746		02-16-1999	Boutillon et al.	
10.	US-5,840,839		11-24-1998	Wang et al.	
11.	US-5,837,249		11-17-1998	Heber-Katz et al.	
12.	US-5,744,144		04-28-1998	Finn et al.	
13.	US-5,580,563		12-03-1996	Tam	
14.	US-5,019,383		05-28-1991	Hopp	
15.	US-5,019,369		05-28-1991	Presant et al.	
16.	US-4,868,155		09-19-1989	Durette et al.	
17.	US-4,837,028		06-06-1989	Allen	
18.	US-4,501,728		02-26-1985	Geho et al.	
19.	US-4,235,871		11-25-1980	Papahadjopoulos et al.	
20.	US-2003-0157160		08-21-2003	Budzynski	
21.	US-2006-0069238		03-30-2006	Koganty	
22.	US-2007-0014844		01-18-2007	Longenecker	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. This estimate depends on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449/PTO				<i>Complete if Known</i>	
				Application Number	10/594,992
				Filing Date	November 16, 2006
				First Named Inventor	B. Michael Longenecker
				Art Unit	1642
				Examiner Name	Mark Halvorson
Sheet	2	Of	11	Attorney Docket Number	34395-806.831

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ² – Number ⁴ – Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	23.	EP-0093851	11-16-1983	New York Blood Center, Inc.		
	24.	EP-0203676	12-03-1986	The Wistar Institute of Anatomy and Biology		
	25.	EP-0230893	08-05-1987	Bracco Industria Chimica		
	26.	EP-0491628	06-24-1992	Pasteur Institute		
	27.	EP-0945461	09-29-1999	Pasteur Institute		
	28.	EP-1065212	01-03-2001	Pasteur Institute		
	29.	EP-1182210	02-27-2002	Bastert et al.		
	30.	FR-2776926 A1	10-08-1999	Gahery-Segard et al.		
	31.	WO-2005-112546	12-01-2005	Biomira Inc.		
	32.	WO-1993-21211	10-28-1993	Laboratorios Menarini		
	33.	WO-1995-27505	10-19-1995	Biomira, Inc.		

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reigia of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and to be processed by the USPTO) an application. ¹Compliance is governed by 37 CFR 1.92 and 1.97 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete the form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				<i>Complete if Known</i>	
				Application Number	10/594,992
				Filing Date	November 16, 2006
				First Named Inventor	B. Michael Longenecker
				Art Unit	1642
				Examiner Name	Mark Halvorson
Sheet	3	Of	11	Attorney Docket Number	34395-806.831

	34.	WO-1996-40236 A1	12-19-1996	National Jewish Center for Immunology and Respiratory Medicine		
	35.	WO-1997-34921 A1	09-25-1997	Livingston et al.		
	36.	WO-1997-38010 A2	10-16-1997	U British Columbia		
	37.	WO-1998-50527	11-12-1998	Agrawal		
	38.	WO-2001-12217 A1	02-22-2001	Altarex Corp.		
	39.	WO-2001-36433	05-25-2001	Biomira, Inc.		
		WO-2001-70265	09-27-2001	Biomira Inc.		
	40.	WO-2002-76485	10-03-2002	Budzynski		
	41.	WO-2003-89574 A2	10-30-2003	Biomira, Inc.		
	42.	WO-2003-89574 A3	10-30-2003	Biomira, Inc.		
	43.	WO-2005-112546	12-01-2005	Biomira Inc.		

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
--------------------	-----------------------	---	----------------

Examiner Signature		Date Considered
--------------------	--	-----------------

* ¹See 37 CFR 1.56. Enter list if reference considered, whether or not citation is in conformance with MPEP 609. Do not list through question if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (e.g., p. 36). *See Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. The collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. This estimate does not include the time you spend to review the form, the processing time by the USPTO, or the amount of time you require to complete this form and/or suggestions for reducing this burden. Should you have comments concerning the burden estimate or suggestions for reducing this burden, please send the completed form to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449/PTO				Complete if Known	
				Application Number	10/594,992
				Filing Date	November 16, 2006
				First Named Inventor	B. Michael Longenecker
				Art Unit	1642
				Examiner Name	Mark Halvorson
Sheet	4	Of	11	Attorney Docket Number	34395-806.831

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
	44.	"About the Albert B. Sabin Vaccine Institute," Cancer Immunol Immunotherapy 52(Suppl. 1):S1-S38 (2003)	
	45.	ALVING, "Lipopolysaccharide, Lipid A, and Liposomes Containing Lipid A as Immunologic Adjuvants," Immunobiol 187 (3-5):430-446 (1993)	
	46.	APOSTOLOPOULOS et al., "Induction of HLA-A2-Restricted CTLs to the Mucin 1 Human Breast Cancer Antigen," J Immunol 159:5211-5218 (1997)	
	47.	BAKKER-WOUDENBERG et al., "Liposomes as Carriers of Antimicrobial Agents or Immunomodulatory Agents in the Treatment of Infections," Eur J Clin Microbiol Infect Dis 12(Suppl 1):61-67 (1993)	
	48.	BARTELS et al., "Adoptive Cellular Immunotherapy of Cancer in Mice Using Allogenic T-Cells," An Oncology Journal for Surgeons 3(10:67-73 (1996)	
	49.	BENMOHAMED et al., "High Immunogenicity in Chimpanzees of Peptides and Lipopeptides Derived from Four New Plasmodium Falciparum Pre-Erythrocytic Molecules," Vaccine 18:2843-2855 (2000)	
	50.	BENMOHAMED et al., "Lipopeptide immunization Without Adjuvant Induces Potent and Long-Lasting B, T, Helper, and Cytotoxic T Lymphocyte Responses Against a Malaria Liver stage Antigen in Mice and Chimpanzees," Eur J Immunol 27:1242-1253 (1997)	
	51.	BROSSART et al., "Identification of HLA-A2-Restricted T-Cell Epitopes Derived From the MUC1 Tumor Antigen for Broadly Applicable Vaccine Therapies," Blood 93(12):4309-4317 (1999)	
	52.	BURCHELL et al., "Effect of Modification of Carbohydrate Side Chains on the Reactivity of Antibodies with Core-Protein Epitopes of the MUC1 Gene Product," Epith Cell Biol 2:155-162 (1993)	

Examiner Signature	Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Do not file through this section if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (optional). *See Keys Codes of USPTO Patent Documents at www.uspto.gov or MPEP 601.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the parent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is provided by 35 U.S.C. 122(b) and 37 CFR 1.14. This information is mandatory to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. This will be dependent on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449/PTO				<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Application Number	10/594,992
Sheet	5	Of	11	Filing Date	November 16, 2006
				First Named Inventor	B. Michael Longenecker
				Art Unit	1642
				Examiner Name	Mark Halvorson
				Attorney Docket Number	34395-806.831

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	53.	BUUTTS et al., "Randomized Phase IIIB Trial of BLP25 Liposome Vaccine in Stage IIIB and IV Non-Small Cell Lung Cancer," <i>J Clin Onc</i> 23(27):6674-6681 (2005)	
	54.	BUUTTS et al., "A multicenter phase IIIB randomized study of liposomal MUC1 vaccine for immunotherapy of non-small cell lung cancer (NSCLC): L-BLP25 non-small cell cancer study group," <i>Ann Onc</i> 15(Suppl.3):1112 (2004) (Abstract)	
	55.	CARMON et al., "Novel Breast-Tumor-Associated MUC1-Derived Peptides: Characterization in D ^b /X-B2 Microglobulin (β2m) Null Mice Transgenic for a Chimeric HLA-A2.1/D ^b Microglobulin Single Chain," <i>Int J Cancer</i> 85:391-397 (2000)	
	56.	DENTON et al., "Sequential Order of T and B Cell Epitope Affects Immunogenicity But Not Antibody Recognition of the B Cell Epitope," <i>Peptide Res</i> 7(5):258-264 (1994)	
	57.	DIEZ-BARRA et al., Chemical Abstract. "Solvent-free phase transfer catalysis. Improvements on serine O-alkylation," Database accession no. 127:220955(1997)	
	58.	ENGELMANN et al., "Identification and Topology of Variant Sequences within Individual Repeat Domains of the Human Epithelial Tumor Mucin MUC1," <i>J Biol Chem</i> 276(30):27764-27769 (2001)	
	59.	FLINN et al., "Oral absorption studies of lipidic conjugates of thyrotropin releasing hormone (TRH)-1 and luteinizing hormone-releasing hormone (LHRH)," <i>Intl J Pharmaceutics</i> 137(1):33-39 (1996)	
	60.	GAHERY-SEGARD et al., "Multiepitopic B-and T-Cell Responses Induced in Humans by a Human Immunodeficiency Virus Type I Lipopeptide Vaccine," <i>J Virol</i> 74(4):1694-1703 (2000)	
	61.	GENDLER et al., "A Highly Immunogenic Region of a Human Polymorphic Epithelial Mucin Expressed by Carcinoma Is Made Up of Tandem Repeats," <i>J Biol Chem</i> 263(26):12820-12823 (1988)	

Examiner Signature	Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Keys Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbol as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Collection is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. This estimate is dependent upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Use as many sheets as necessary)

Sheet

6

Of

11

Complete if Known

Application Number	10/594,992
Filing Date	November 16, 2006
First Named Inventor	B. Michael Longenecker
Art Unit	1642
Examiner Name	Mark Halvorson

Attorney Docket Number

34395-806.831

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ^b	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ^c
	62.	GUAN et al., "Liposomal Formulations of Synthetic MUC1 Peptides: Effects of Encapsulation versus Surface Display of Peptides on Immune Responses," <i>Bioconjugate Chem</i> 9:451-458 (1998)	
	63.	GUPTA et al., "Adjuvants-A Balance Between Toxicity and Adjuvanticity," <i>Vaccine</i> 11(3):293-306 (1993)	
	64.	HANISCH et al., "MUC1: the polymorphic appearance of a human mucin," <i>Glycobiol</i> 10(5):439-449 (2000)	
	65.	HANSKI et al., "Altered Glycosylation of the MUC-1 Protein Core Contributes to the Colon Carcinoma-associated Increase of Mucin-bound Sialyl-Lewis Expression," <i>Cancer Research</i> 53:4082-4088 (1993)	
	66.	HEUKAMP et al., "Identification of Three Non-VNTR MUC1-Derived HLA-A*0201-Restricted T-Cell Epitopes that Induce Protective Anti-Tumor Immunity in HLA-A2/K ^b Transgenic Mice," <i>Int J Cancer</i> 91:385-392 (2001)	
	67.	HILTBOLD et al., "Naturally Processed Class II Epitope from the Tumor Antigen MUC1 Primes Human CD4+ T Cells," <i>Cancer Res</i> 58:5066-5070 (1998)	
	68.	KARANIKAS et al., "Antibody and T cell Responses of Patients with Adenocarcinoma Immunized with Mannan-MUC1 Fusion Protein," <i>J Clin Invest</i> 100:2783-2792 (1997)	
	69.	KARSTEN et al., <i>Cancer Res</i> 58:2541-2549 (1998)	
	70.	KEIL et al., "Towards the Development of Antitumor Vaccines: A Synthetic Conjugate of a Tumor-Associated MUC1 Glycopeptide Antigen and a Tetanus Toxin Epitope," <i>Angew Chem Int Ed</i> 40(2):366-369 (2001)	
	71.	KIM, "Liposomes as Carriers of Cancer Chemotherapy," <i>Drugs</i> 46(4):579-794 (1993)	
	72.	KIRSCHENBAUM et al., "MUC1 expression in prostate carcinoma: correlation with	

Examiner Signature	Date Considered
--------------------	-----------------

*Examiner Initials: Initial of reference considered, whether or not claim is in conformance with MPEP 609. Do not file through faxbox if not in conformance and not considered. Include copy of this form with next communication to applicant. ^aApplicant's unique citation designation number (optional). ^bSee Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ^cEnter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ^dFor Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ^eKind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ^fApplicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application to the USPTO. This will vary depending upon individual case circumstances. Any comments you have in this regard are welcome. The amount of time you require to complete this form and the suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

				<i>Complete if Known</i>	
				Application Number	10/594,992
				Filing Date	November 16, 2006
				First Named Inventor	B. Michael Longenecker
				Art Unit	1642
				Examiner Name	Mark Halvorson
Sheet	7	Of	11	Attorney Docket Number	34395-806.831

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
		clinical grade and stage," Molecular Urology 3:163-167 (1999)	
73.	KREUTER, "Colloidal drug Delivery Systems," Drugs Pharma Sci 66, 4 pages Marcel Dekker 1994		
74.	KUDRYASHOV et al., "Toward optimized carbohydrate-based anticancer vaccines: Epitope clustering, carrier structure, and adjuvant all influence antibody responses to Lewis ^x conjugates in mice," PNAS 98(6):3264-3269 (2001)		
75.	LOPES et al., "Immunoexpression of MUC1 in prostate adenocarcinoma," Virchows Arch 435:330 (1999)		
76.	MACHY et al., "Liposomes in Cell Biology and Pharmacology, 4 pages, John Libbey		
77.	MACLEAN et al., "Prognostic Significance of Preimmunotherapy Serum CA27.29 (MUC-1) Mucin Level After Active Specific Immunotherapy of Metastatic Adenocarcinoma Patients," J Immunotherapy 20(1):70-78 (1997)		
78.	MARTINON et al., "Immunization of Mice with Lipopeptides Bypasses the Prerequisite for Adjuvant," J Immunol 149(10):3416-3422 (1992)		
79.	MEYLAN et al., "Atom/Fragment Contribution Method for Estimating Octanol-Water Partition Coefficients," J Pharm Sci 84(10):83-92 (1995)		
80.	MILLER et al., "Vaccination of Rhesus Monkeys with Synthetic Peptide in a Fusogenic peptide liposome Elicits Simian Immunodeficiency Virus-Specific CD8+ Cytotoxic T Lymphocytes," J Exp Med 176:1739-1744 (1992)		
81.	MOLLER et al., "NMR-based determination of the binding epitope and conformational analysis of MUC-1 glycopeptides and peptides bound to the breast cancer-selective monoclonal antibody SM3," Eur J Biochem 269:1444-1455 (2002)		
82.	MORTARA et al., "Selection of Virus Variants and Emergence of Virus Escape		

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Keys Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbol as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. This collection is dependent upon the individual needs of the USPTO in determining the amount of time you require to complete this form and/or suggestions for reducing this burden. Should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-766-9199) and select option 2.

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Application Number	10/594,992
Sheet	8	Of	11	Filing Date	November 16, 2006
				First Named Inventor	B. Michael Longenecker
				Art Unit	1642
				Examiner Name	Mark Halvorson
				Attorney Docket Number	34395-806.831

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
		Mutants after Immunization with an Epitope Vaccine," J Virol 72(2):1403-1410 (1998)	
	83.	MOUNTAIN, "Revisions in the International System for Staging Lung Cancer," Chest 111:1710-1717 (1997)	
	84.	NEURATH et al., "Antibodies to Hepatitis B Surface Antigen (HbsAg) Elicited by Immunization with a Synthetic Peptide Covalently Linked to Liposomes," J General Virology 65:1009-1014 (1984)	
	85.	NG et al., "Prognostic significance of increased immunodetectable MUC-1 in prostate cancer," Proceeding of the American Association for Cancer Research 38:542 (1997)	
	86.	NORTH and BUTTS, "Vaccination with BLP25 liposome vaccine to treat non-small cell lung and prostate cancers," Expert Rev Vaccines 4(3):249-257 (2005)	
	87.	NORTH et al., "Randomized Phase IIIB trial of BLP25 Liposome Vaccine in Stage IIIB and IV Non-Small Cell Lung Cancer," J Clin Onc 23(27):6674-6681 (2005)	
	88.	OSTRO et al., "Use of Liposomes as Injectable-Drug Delivery Systems," Am J Hospital Pharmacy 46(8):1576-1587 (1989)	
	89.	PAPADOPOULOS et al., "Tumor Angiogenesis Is Associated with MUC1 Overexpression and Loss of Prostate-specific Antigen Expression in Prostate Cancer," Clin Cancer Res 7:1533-1538 (2001)	
	90.	PETRAKOU et al., "Epitope Mapping of Anti-MUC1 Mucin Protein Core Monoclonal Antibodies," Tumor Biol 19(Suppl.1):21-29 (1998)	
	91.	PIHL et al., "Mucinous Colorectal Carcinoma: Immunopathology and Prognosis," Pathology 12:439-447 (1980)	
	92.	PRICE et al., "Summary Report on the ISOBM TD-4 Workshop: Analysis of 56 Monoclonal Antibodies against the MUC1 Mucin," Tumor Biol 19(Suppl.1):1-20	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (optional). *See Keys Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbol as indicated on the document under WIPO Standard ST.16 if possible. *Applicant is to place a check mark here if English language Translation is attached.

This collection of information is conducted by the U.S. Patent and Trademark Office. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.106. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				Complete if Known	
				Application Number	10/594,992
				Filing Date	November 16, 2006
				First Named Inventor	B. Michael Longenecker
				Art Unit	1642
				Examiner Name	Mark Halvorson
Sheet	9	Of	11	Attorney Docket Number	34395-806.831

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
		(1998)	
	93.	REICHEL et al., "Synthetic carbohydrates-based vaccines: synthesis of an L-glycero-D-manno-heptose antigen-T-epitope-lipopeptide conjugate," Chem Comm NEED VOLUME:2087-2088 (1997)	
	94.	SANGHA et al., "L-BLP25: A peptide vaccine strategy in non-small cell lung cancer," Clin Cancer Res 13(15):4652s-4654s (2007)	
	95.	SAUZET et al., "Long-lasting anti-viral cytotoxic T lymphocytes induced in vivo with chimeric-multirestricted lipopeptides," Vaccine 13(14):1339-1345 (1995)	
	96.	SCHER et al., "Post-therapy Serum Prostate-Specific Antigen Level and Survival in Patients with Androgen-Independent Prostate Cancer," J National Cancer Institute 91(3):244-251 (1999)	
	97.	SCHERPHOF et al., "Uptake and Intracellular Processing of Targeted and Nontargeted Liposomes by Rat Kupffer Cells in vivo and in vitro," Annals NY Academy of Sciences NEED VOLUME: 369-385 (NEED YEAR)	
	98.	SCHOLFIELD et al., "MUC1 mucin in urological malignancy," BJJU Intl 91:560-566 (2003)	
	99.	SETH et al., "Evaluation of a Lipopeptide Immunogen as a Therapeutic in HIV Type 1-Seropositive Individuals," Aids Res Human Retroviruses 16(4):337-343 (2000)	
	100.	SOARES et al., "Three Different Vaccines Based on the 140-Amino Acid MUC1 Peptide with Seven Tandemly Repeated Tumor-Specific Epitopes Elicit Distinct Immune Effector Mechanisms in Wild-Type Versus MUC1-Transgenic Mice with Different Potential for Tumor Rejection," J Immunol 166:6555-6563 (2001)	
	101.	SPRINGER, "T and Tn, General Carcinoma Autoantigens," Science 224:1198-1206	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initials of reference considered, whether or not citation is in conformance with MPEP 609. Do not file through fax if not in conformance and not considered. Include copy of the form with next communication to applicant. *Applicant's unique citation designation number (optional). *See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ¹Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ²Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. This collection may vary significantly based on individual case. Any comments on the amount of time you require to complete this form, and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				<i>Complete if Known</i>	
				Application Number	10/594,992
				Filing Date	November 16, 2006
				First Named Inventor	B. Michael Longenecker
				Art Unit	1642
				Examiner Name	Mark Halvorson
Sheet	10	Of	11	Attorney Docket Number	34395-806.831

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. [†]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T [§]
	(1984)		
	102.	TAYLOR-PAPADIMITRIOU et al., "Molecular aspects of mucin," <i>Cancer Rev</i> 11-12:11-24 (1988)	
	103.	TOYOKUNI et al., "Synthetic Vaccines: Synthesis of a Dimeric Tn Antigen-Lipeptide Conjugate That Elicits Immune Responses against Tn-Expressing Glycoproteins," <i>J Am Chem Soc</i> 116:395-396 (1994)	
	104.	TSUNODA et al., "Lipeptide Particles as the Immunologically Active Component of CTL Inducing Vaccines," <i>Vaccine</i> 17:675-685 (1999)	
	105.	VITIELLO et al., "Development of a Lipeptide-based Therapeutic Vaccine to Treat Chronic HBV Infection," <i>J Clin Invest</i> 95:341-349 (1995)	
	106.	VON MENDSORFF-POUILLY et al., Abstract Only, "Human MUC1 mucin: a multifaceted glycoprotein," <i>Int J Biol Markers</i> 15(4):343-356 (2000)	
	107.	VON MENDSORFF-POUILLY et al., "Reactivity of Natural and Induced Human Antibodies to MUC1 Mucin with MUC1 Peptides and N-Acetylgalactosamine (GalNAc) Peptides," <i>Int J Cancer</i> 86:702-712 (2000)	
	108.	VON MENDSDORFF-POUILLY et al., "Survival in Early Breast Cancer Patients is Favorably Influenced by a Natural Humoral Immune Response to Polymorphic Epithelial Mucin," <i>J Clin Oncol</i> 18(3):574-583 (2000)	
	109.	WASSEF et al., "Liposomes as Carriers for Vaccines," <i>Immunomethods</i> 4:217-222 (1994)	
	110.	WILKINSON et al, <i>Bioconj Chem</i> 9:539-547 (1998)	
	111.	ZENG et al., <i>J Peptide Science</i> 2:86-72 (1996)	

Examiner Signature	Date Considered
--------------------	-----------------

*Examiner: [†] latest of reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [‡] Applicant's unique citation designation number (optional). [§]See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [¶]Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ^{**}For foreign patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ^{***}Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ^{**}Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122. The collection of information will take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. This will have a dependency upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the paperwork Reduction Act of 1995, no persons required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Application Number	10/594,992
Sheet	11	Of	11	Filing Date	November 16, 2006
				First Named Inventor	B. Michael Longenecker
				Art Unit	1642
				Examiner Name	Mark Halvorson

NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
112.	EP03721571	Search Report dated February 28, 2006
113.	EP06022033.2	Search Report mailed February 12, 2008
114.	EP05769609.8	Office Action mailed June 1, 2011
115.	EP06808953.1	Search Report and Opinion mailed July 16, 2008
116.	PCT/US03/10750	Search Report mailed July 20, 2005
117.	TW094110256	Search Report mailed March 29, 2011
118.	PCT/IB02/02188	Search Report mailed December 16, 2002
119.	PCT/IB02/02188	IPRP mailed July 18, 2005
120.	PCT/IB06/02771	Search Report mailed February 27, 2007
121.	PCT/IB06/02771	IPRP and Written Opinion mailed January 10, 2008
122.	PCT/IB05/02479	Search Report mailed January 27, 2006
123.	PCT/IB05/02479	IPRP and Written Opinion mailed October 4, 2006
124.	PCT/IB02/02188	Search Report mailed December 16, 2002
125.	PCT/IB02/02188	IPRP mailed July 18, 2005

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST-3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST-16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is guaranteed under 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.